The Xtreme HS Wetgas Meter has been developed by Pietro Fiorentini in order to offer to end users a dedicated product to complete the range of metering solutions.

It is a modular non-intrusive, inline system, providing real time measurement of oil, water and gas flow rates in Wetgas flow regimes (Lockhart-Martinelli < 0.3) without any separation or moving parts. It implements the latest state of the art technologies such as the Flow Velocity meter and the NIR-WLR (near infrared) meter. It works in single phase and in multiphase streams, accurately measuring in Wetgas condition.

**TECHNOLOGY**

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**KEY FEATURES**

- Accurate in all wetgas flow regimes (LM 0 – 0.3)
- Genuine three phase wet gas meter
- Highest speed available on the market for density measurement
- High accuracy due to the fast gamma detector
- Stand-alone system or add-on module to other Fiorentini metering systems
- High repeatability and long term stability due to high quality components
- High flexibility: both onshore and offshore application
- Suitable for mobile applications (well testing on mobile units)
- Easy Calibration
- Salinity independent
- No Water/Oil transition region

The flow rates of oil, water and gas are calculated combining the measurements of the differential pressure across the Venturi inlet, the gamma absorption and the flow velocity in order to provide an even more reliable and robust measurement to our customers. The fluid velocity is measured both by the Venturi and the flow propagation detectors. The Water-Cut is measured by the NIR-WLR meter.
<table>
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<th>SPECIFICATIONS</th>
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| **Operating Range** | • 0-0.3 LM  
• 0-100% WLR |
| **Typical uncertainty (90% CL)** | • Gas flow rate: ±2% rel. (@ 0.0 < LM < 0.02)  
±4% rel. (@ 0.02 < LM < 0.3)  
• WVF: ±0.10% absolute (@ 0.0 < LM < 0.02)  
±0.25% absolute (@ 0.02 < LM < 0.3)  
• Hydrocarbon flow rate: ±4% relative |
| **Size** | Flanged spool from 2” up to 12” |
| **Design Pressure & Temperature** | Up to 5.000 psi, up to 302°F (150°C) |
| **Spool Material** | AISI316, Duplex, Inconel 625 or others upon request |
| **Process Connection** | Flanged or threaded |
| **Communication Interface** | Communication ports:  
• RS-485, Ethernet (single or redundant)  
Communication protocols:  
• Modbus ASCII/RTU, TCP/IP |
| **Electronics Specification** | • ATEX/ IECEX certification Ex ia IIB T4 Ga  
• Ambient temperature -40° C / + 70° C |
| **Flow Computer** | • Real Time controller, Operating system VxWorks  
• Ambient temperature -40° C / + 70° C  
• Power supply: 24VDC, or 110÷240 V 50÷60Hz  
• Power consumption: 60W  
• Enclosure for safety area or for hazardous area  
• Weather protection: IP 65  
• Stainless steel or aluminium enclosure  
• With local display (as optional) |
| **HMI** | HMI for Windows XP, Vista, and 7 |

For further information, please visit our Website:  
http://www.fiorentini.com